The International Journal for

THE EDUCATION OF THE BLIND

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A Brief Review of the Research on Braille Reading

By Leo F. Hanley, Director

College Reading Center, Boston University

The Need for Research on the Reading of Braille

Our generation has been privileged to witness gigantic advancements in those areas which vitally affect our blind population. Two evidences of progress come to mind immediately: medical discoveries have reduced the incidence of blindness in several areas and new communication devices (particularly in the field of recordings) bring the blind child and adult into ready contact with a great variety of information. In the light of these developments, one might ask, is there any value to be derived from research on the reading of Braille?

The Incidence of Blindness. Most censuses of our blind population tend to be conservative, since all cases are not reported to central agencies. In addition, these estimates are usually made on the broad category of those who are blind within the legal definition of the term. Very seldom has any attempt been made to identify the number of educationally blind students (those dependent upon Braille as opposed to those who can read large-type materials.) Using Saterlee's[1] figures, we find that there were *at least* 11,769 "blind" students enrolled in residential or public schools in 1959. No breakdown is made of those who do or do not use Braille. In a study published that same year, Cruickshank and Trippe[2] listed 1,163 children in New York State *alone* who were totally blind or who possessed only light perception. These children would not be able to read large-type materials. It should be noted that, if these latter figures were extrapolated to a national level (using the New York population ratio), the estimate would far surpass any figure published to date. Moreover, while the incidence of blindness has been reduced through medical advances (especially in the areas of infectious diseases, injuries and oxygen damage encountered in premature births) Kerby[3] foresees no immediate end to blindness until other major causes (e.g. anomalies of structure, unknown prenatal factors, etc.) have been eradicated.

Recording Devices. With the advent of such instruments as the Talking Book and other recording techniques, many educators felt that Braille would be reduced to the position of a secondary medium in the education of the blind. The use of the Talking Book has proved to be of inestimable service in the recreatory reading of the blind and as a supplement to classroom instruction. Its value in textbook material, however, is still in some doubt. This point was brought out by Lowenfeld[4] as early as 1945 in a study comparing the comprehension results of Brailled and recorded textbook material; scores attained through Braille were consistently higher than those achieved through use of the Talking Book. The advantages of Brailled materials is further demonstrated by the fact that the great majority of blind students today prefer to take their college entrance examination tests in Braille rather than through a recording device.

With these facts in mind, it seems probable that our blind population will be with us for some time to come and that

Braille will continue to be the principal medium employed in the formal education of the blind.

The Current Status of Research on the Reading of Braille

Volumes of educational research dealing with the reading problems of the sighted students have been written. While the quantity of these materials is self-evident, authorities have often voiced the opinion that the quality of the research left something to be desired. It was not until the last few years that reviewers of such research have begun to express much satisfaction with the studies made. Inadequate control of variables, poor statistical procedures, unrepresentative populations, faulty assumptions or generalizations are only a few of the factors which many times reduced the research to the status of being of little or no value.

If research among the sighted is subject to these pitfalls, one might easily shudder at the thought of the *abysses* that lie in wait for those who would do research among the blind: the wide-spread blind population reduces the number of studies which might be termed "representative"; a number of studies have shown that contributing variables (e.g. physical and psychological factors) occur more frequently among the blind, and thus the number of controls must be increased; many of the testing instruments lack proper standardization and often leave one with results that are inconclusive; important and relevant pieces of literature are often presented in out-of-the-way publications or are privately distributed and so not available to the interested researcher. Dean[5], in an evaluation of the general research pertaining to the blind, found the over-all quality "wanting" because of several causes: inexact terminology and definitions, poor methodology, questionable techniques, partial or non-existent theory, inaccurate conclusions, schisms over minority group concepts and individualist ideas, great amounts of "autobiographical" (rather than objective) material, etc. If the quality of general research among the blind is so inadequate, it is logical to conclude the research on Braille reading will suffer from these same faults.

A good deal of effort has been made to provide the researcher with the information that has been already ascertained about Braille reading. Most textbooks in the field offer vast amounts of references for the interested reviewer. In addition, selected bibliographies are available through several sources. Lende[6] perhaps offers the most detailed collection of data on material published prior to 1953. Various authors have combined their talents to present annual listing of selected research in the April or May issue (it varies from year to year) of the *Elementary School Journal*. Ingram[7], Myerson[8], and Ashcroft[9] have contributed three comprehensive reviews of the general research in *The Review of Educational Research*. The professional magazines, *The New Outlook for the Blind* and *The International Journal for the Education of the Blind*, have made it their duty to publish or review important segments of current research. Two of the largest organizations whose members work directly with the blind (the American Association of Instructors of the Blind and the American Association of Workers for the Blind) print reports of workshops and research projects in their annual proceedings. Although the amount of periodical literature concerning touch reading is impressive (especially when compared with other areas within the broad field of blindness) it is disappointing to note that only one book, Maxfield's[10], has been published and this is sadly outdated (1928). A further cause for distress is the realization that less than ten supervised studies (theses on the master's or doctoral level) are reported.

The writer will not attempt to review in the space of this short article all the

areas which relate to the study of touch reading. For the sake of convenience, four topics which most often appear in the literature will be discussed: the composition of Braille, the mechanics of touch reading, instructional methods, and tests of Braille reading achievement.

Composition of Braille. A number of other methods of embossed printing competed with the Braille system during the last part of the nineteenth century and the beginning of the twentieth century. The literature of that time reflected the huge amount of conflict that existed in the "type" wars.

Rodenberg[11] gives us an interesting account of the struggles waged between supporters of raised line and dot (punctiform) writing. New York Point, a punctiform method of printing, was perhaps the greatest contender for the position which Braille holds today. The New York form took into account the frequency of letters (which Braille does not) and offered the possibility of more dot combinations than the sixty-three-combination limit of Braille. Frank H. Hall, with his invention of the Braillewriter, made the rapid writing of Braille possible and so the corner was turned in favor of Braille.

Braille has undergone many changes since its inception some 120 years ago. A standard English Braille is now used among all English-speaking peoples. Krebs[12], in reviewing the latest revision of 1959, points out that there are now 189 symbols incorporated into English Braille; the use of contractions (abbreviated forms for whole words or parts of words) requires less space to be covered by the reader or the writer.

Zickel and Hooper[13] offer an excellent review of the modern methods and standards in producing Braille. Interpointing (printing on both sides of a page) and other space-saving devices have increased the availability of Brailled materials.

The Mechanics of Braille Reading. This section of the research deals with those factors involved in the perception of Braille. Early European studies conducted by Burklen[14] and the American study completed by Fertsch[15] form the basis for much of what we know about the mechanics of touch reading.

In these studies, finger movements were described in great detail. Two types of movement were detected. One finger (usually the right index finger) was used for synthesis (an over-all view of the word); the other finger (usually the left index finger) was given the task of analysis (checking for incorrect or unclear perceptions) or used as a control for keeping on the line or the page. Circling (vertical rather than horizontal) movements occurred more often among poor readers. In some instances, better readers read one-half of the line with each finger. Usually, the other fingers remain a short distance above the page. However, in some rare cases, a kind of "span vision" is made through the use of the usually idle "extra" fingers. Good readers are able to anticipate word endings and thoughts. This last phenomenon can also be seen among the better sighted readers. Better readers employed a light, fluent touch and kept the fingers at an acute angle to the page.

The speed of the Braille readers was approximately one-third as fast as sighted readers. It should be noted that most of these studies were not done on the highly contracted form of Braille used today. It would be interesting to see if speed of present-day Braille (where words are usually shorter in length) can be improved through the use of more synthetic movements.

Instruction in Braille. Like the research on the reading improvement of the sighted, literature on touch reading is filled with arguments in regard to the various methods of teaching beginning reading.

Three methods are named: the Letter Method (analysis), the Word Method (synthesis), and the Letter-Word Method (analysis plus synthesis). The last technique, the Letter-Word Method, now seems to be most popular, both with the teachers of the blind and the sighted.

A further complication found in Braille is the question of which grade of Braille should be taught first. For many years, children began with Grade 1 Braille, an uncontracted form where words are spelled out in full detail. The introduction of contractions from Grade 1½ and Grade 2 Braille was delayed until the upper grades. In the late 1940's, a few schools for the blind began experimenting with the teaching of Grade 2 Braille in beginning reading.

Hooper[16] and Loomis[17] offer convincing arguments for the early introduction of Grade 2 Braille. An overwhelming majority of Grade 2 signs (144 out of 185) appear in first grade vocabularies. The first 1,000 words of the Thorndike List employ 152 out of 185 of these signs. Even with the revisions of 1959 (Grade 2 now has 189 signs), the frequency of these signs is a telling factor. The relearning procedures (and their possible proactive inhibitive effect) which are involved in movement between the Grades of Braille are removed when Grade 2 Braille is taught in the beginning. In addition, the shorter words would tend to decrease the amount of fatigue and boredom which some students experience with uncontracted words.

It is a point of fact that more blind students are reading Grade 2 Braille today than did their predecessors. This practice will affect their speed of reading. As we shall see in the next section, it will also change some of the basic assumptions in our testing programs.

Blind children, for the most part, use the same basal reading series used with sighted children. It is unfortunate that so much of this material is pictorially oriented. This fact does place the blind student under some handicap.

This writer has not been able to find references in the literature which would give information on methods of improving reading skills other than those which deal with the perception of the material or reading readiness. Means of instructing students in comprehension skills (identifying main ideas and details, noting patterns, etc.) or the higher critical reading skills (distinguishing between fact and opinion, recognizing mood and tone, etc.) were not found in any article or study. One would wonder if there is any formal instruction (developmental reading) being undertaken in our instruction of the blind student.

Tests of Braille Reading Achievement. The American Printing House for the Blind, the central agency for most of the printing of Braille materials in the United States, provides the following "survey type" test of Braille reading achievement:

DIAGNOSTIC READING TESTS: SURVEY SECTION METROPOLITAN ACHIEVEMENT TESTS

STANFORD ACHIEVEMENT TESTS

With minor adaptations these tests are in the same form as those employed with sighted students. The serious difficulty with these tests lies in their method of administration and timing. The tests are administered in two parts: in one part the directions are read by the teacher and no specific time limits are set on the answering period; in the other part of the tests the students are required to read the questions themselves and an arbitrary time allotment of two to three times the amount given sighted pupils is allowed. The 2.5 time "bonus" is based on a suggestion of Hayes[18] who in turn based his original figures on a 1918 student population. The time allotments were also made on the

reading of Grade 1½ Braille. With more students reading Grade 2 Braille today (with its advantages of shorter words and more contractions), we might expect this time coefficient to be falsely high. It is difficult to imagine what norms could be used with the sections of the tests where no specific time limits are given. The same problems of time limits can be found in the Doraiswamy[19] and Niday[20] theses. The problem of the grade of Braille (the former used Grade 1 and the latter employed Grade 1½) again arises in both of these studies.

Only one diagnostic reading test is published, Gray's STANDARDIZED ORAL READING PARAGRAPHS. Time limits again offer some difficulty here. Errors in reversals, omissions, confusions, etc., can be detected through this test. However, letters confused in the ordinary alphabet are not always the same as those which are confused in Braille. In addition, no measurement of comprehension is included in this test. It is not even likely that comprehension questions could be built for these paragraphs, since the level of abstraction "jumps" so quickly from selection to selection.

We look forward to the time when new methods of modification (especially timing) will make the use of these tests more valid. Even then we shall need to adapt or construct more diagnostic tools which will tell us not only *that* a child does not read Braille well but also *why* he cannot read.

Areas for Future Research

A good deal remains to be done in the research on touch reading. Without attempting to cover the entire problem, this writer would like to make some suggestions for future studies in areas which warrant immediate attention.

Time Allotments in Testing. Present standards for time allowances need immediate revision. New norms for the Braille-reading student should be built which take into consideration the Grade 2 rather than Grade 1½ Braille speed factors.

Diagnostic Tests. Tests pinpointing the level of Braille reading achievement and areas which need correction would be of great value. These tests should not be limited to word analysis evaluations, but should embrace the areas of higher reading skills.

Investigations into Causes of Reading Failure. Most of the studies which have dealt with the reading achievement of blind students have failed to plumb the causes of reading disability. Complete records (and these not always available) of the child's physical and emotional makeup, his educational and home environment, etc., would be of inestimable value. The construction of an intelligence measuring device which is less affected by verbal backgrounds would be a most useful instrument in determining capacities.

Construction or Adaptation of Remedial Procedures and Materials. To this writer's knowledge, there are no materials in existence which have been specifically built to correct Braille-reading deficiencies. More non-pictorially oriented materials would aid in the everyday developmental instruction of the blind.

Training for Teachers. Workshops in reading improvement would furnish teachers with the type of background they will need for the diagnosing and correcting of reading disabilities.

Pooling of Research. A central clearing house of findings and problems would give a good deal of impetus to research.

It is the purpose of this article to review in capsulated form the research which has been done on touch reading. A good deal of work lies before us. Only by working together can any progress be made. The College Reading Center at Boston

University would welcome correspondence and any interchange of ideas on this vital subject.

BIBLIOGRAPHY

1. Saterlee, Hilma, DIRECTORY OF AGENCIES SERVING BLIND PERSONS IN THE UNITED STATES AND CANADA. New York, American Foundation for the Blind, 1959. p. 222
2. Cruickshank, William M. and Matthew J. Trippe, SERVICES TO BLIND CHILDREN IN NEW YORK STATE. Syracuse, Syracuse University Press, Special Education and Rehabilitation Monograph Series 4, 1959. p. 495
3. Kerby, C. Edith, CAUSES OF BLINDNESS IN CHILDREN OF SCHOOL AGE. New York, National Society for the Prevention of Blindness, 1958. p. 12
4. Lowenfeld, Berthold, BRAILLE AND TALKING BOOK READING: A COMPARATIVE STUDY. New York, American Foundation for the Blind, 1945. p. 53
5. Dean, Sidney I., "Some Notes on Research Problems With the Blind", *New Outlook for the Blind*. Vol. 50, No. 6, June, 1956. pp. 200-204
6. Lende, Helga, BOOKS ABOUT THE BLIND. New York, American Foundation for the Blind, 1953. pp. 76-83
7. Ingram, Christine P., "The Visually Handicapped, the Delicate and the Crippled", *Review of Educational Research*. Vol. 11, No. 3, June, 1941. pp. 315-29
8. Myerson, Lee, "The Visually Handicapped", *Review of Educational Research*. Vol. 23, No. 5, December, 1953. pp. 476-492
9. Ashcroft, Samuel C., "The Blind and Partially Seeing", *Review of Educational Research*. Vol. 29, No. 5, December, 1959. pp. 519-528
10. Maxfield, Kathryn E., THE BLIND CHILD AND HIS READING. New York, American Foundation for the Blind, 1928. pp. 215
11. Rodenberg, Louis W., THE STORY OF EMBOSSED BOOKS FOR THE BLIND. New York, The American Foundation for the Blind, 1955. p. 16
12. Kiebs, Bernard M., "Reviewing the New Braille Code", *New Outlook for the Blind*. Vol. 53, No. 11, November, 1959. pp. 328-329
13. Zickel, Virgil E. and Marjorie S. Hooper, "The Program of Braille Research: A Progress Report", *The International Journal for the Education of the Blind*. Vol. 6, No. 4, May, 1957. pp. 79-86
14. Burklen, Karl, TOUCH READING OF THE BLIND. (Translated by Frieda K. Merry) New York, American Foundation for the Blind, 1932. p. 54
15. Fertsch, Pauline, AN ANALYTIC STUDY OF BRAILLE READING. Unpublished doctoral dissertation, Texas University, Austin, Texas, 1942. p. 94
16. Hooper, Marjorie S., "Braille Contractions and Children's Vocabularies", AMERICAN ASSOCIATION OF INSTRUCTORS OF THE BLIND, 1946. pp. 18-41
17. Loomis, Madeleine S., WHICH GRADE OF BRAILLE SHOULD BE TAUGHT FIRST?", New York, Teachers College, Columbia University, 1948. p. 103
18. Hayes, Samuel P., "Practical Hints for Testers", *Teachers Forum for Instructors of the Blind*. Vol. 11, 1939. pp. 82-93
19. Doraiswamy, Chinniah, AN ANALYSIS OF READING DIFFICULTIES AMONG THE BLIND CHILDREN IN PRIMARY GRADES. Unpublished master's thesis, Boston University, Boston, Massachusetts, 1934. p. 63
20. Niday, W. Raymond, A NATION-WIDE SURVEY OF BRAILLE READING IN SPEED AND COMPREHENSION. Unpublished master's thesis, Ohio State University, Columbus, Ohio, 1939.

The Residential School as a Student Teaching Center

By Don L. Walker, Principal

Iowa Braille and Sight Saving School

Throughout history, the residential school for visually handicapped children in America has assumed many roles. It has been thought of as an asylum, a "different world," a place of concealment for social misfits, the "last resort" for a visually handicapped child, a "home" for the blind, a trade school, and the "last word" in the education of the visually handicapped. It has, in fact, at various times and places, been all these and much more.

In the past two years, through the efforts of a number of dedicated educators, a residential school has emerged in an entirely new role: that of a *laboratory for the professional education of public school teachers.* This school is the Iowa Braille and Sight Saving School, in Vinton, Iowa.

In order for the reader to understand the full significance of this new role of the residential school, it is necessary to explain the nature of the teacher education program involved.

For the past eight years, under the direction of Dr. Dwight K. Curtis, the Department of Teaching at Iowa State Teachers College has sought to provide the highest level of quality possible in

laboratory experiences for future public school teachers. In this program, the student teaching experience is considered to be the most vital part and the climax of the undergraduate teacher education program. The college operates four student teaching centers in local public schools within a radius of one hundred miles of Cedar Falls, in addition to the one at the Braille and Sight Saving School. Each center has a resident coordinator of student teaching who is a member of the college faculty.

Student teachers live and teach in the various communities for a period of nine weeks during their final year of college. Each student is assigned to a regular member of the school faculty who has had systematic preparation in the supervision of student teachers. The student assumes all the privileges and responsibilities of a regular faculty member, under the guidance of the supervising teacher. The supervising teacher in turn receives help and guidance from the coordinator.

The student must make his own lesson plans, search for research materials, and is helped and encouraged to evaluate his own work. Eventually the student teacher takes full responsibility for the classes in which he teaches, as well as in some extra-class activities.

Student teachers make regular, planned observations of teaching outside of the area in which they are assigned and assume teaching responsibility. They have many individual conferences with their supervising teachers, and they attend weekly seminars to discuss problems or questions which arise as a result of their teaching or observation experiences.

At the end of the nine weeks period, the student teacher's work is evaluated by his supervising teacher. The supervising teacher also writes an evaluation of the student's work, which becomes a permanent part of his college record.

In 1958, following a rather extended and energetic effort by D. W. Overbeay, who was then Superintendent of the Iowa Braille and Sight Saving School, Iowa State Teachers College established a student teaching center at the School in Vinton.

Dr. Curtis was delighted to discover that the entire school staff was behind the program. Whereas centers established in other cities had been set up at the administrative level, with teachers participating as they could be persuaded, here the entire faculty was involved from the start. Since one of the basic principles of off-campus student teaching as conceived at ISTC is that every phase of the operation of the participating school is a resource for student teachers, the situation at the Iowa School was ideal.

Every member of the teaching staff, plus the Superintendent and the Principal, took a course in the supervision of student teachers, which was taught by Dr. Curtis himself. Thus, the whole school became a laboratory for teacher education, with every faculty member a "teacher of teachers," and all were oriented to the program in the same way.

The first coordinator was D. A. Hutchinson, who was Principal of the Iowa School when the program was inaugurated.*

Since both the pupils and the student teachers live on campus, there is opportunity for the student teachers to gain a broad understanding of the problems, the development, and the behavior of individual pupils through observation of the children at play and in other non-school activities. Classes in the residential school generally are quite small, compared to public school classes, and afford more opportunity for student teachers to acquire a practical understanding of individual differences in child growth and development and their effect on learning.

During the 1958-59 school year, part of which was consumed setting up the pro-

*Mr. Hutchinson has since been appointed Superintendent of the Indiana School for the Blind.

gram and preparing the staff, fifteen students received their student teaching experience at the Iowa School. In the 1959-60 school year, twenty-seven students completed student teaching in the School.

At first, much difficulty was encountered in persuading the college students that student teaching at the Iowa Braille and Sight Saving School would not jeopardize their chances for employment in the regular public schools. Now, however, the "word" is out that the School in Vinton is one of the most desirable centers operated by the college, and it is selected as first choice by many student teaching candidates. Actually, the "alumni" of the program have done quite well in the matter of securing employment. (They have also done quite well at "selling" the School to other college students!) Most of them have secured desirable positions within the state, and are receiving above-average salaries.

There are many benefits which have accrued to the School as a result of the program. Probably the greatest benefit has been received by the teachers who have participated. They take pride in the knowledge that they are making such a significant contribution to the advancement of education. Furthermore, this knowledge and the responsibility it implies do a great deal to stimulate all teachers in the school to their best efforts. Professional standards and morale among the faculty are high. The student teaching program is not by any means totally responsible for this, but it is one factor.

The college pays $37.50 per student teacher to the School. This money is placed in a fund which is used for projects and activities to help further raise the professional level of the faculty.

To say that the student teaching program does not make extra work for the staff would be an out and out fabrication. It certainly does demand time and energy of the supervising teachers, the Principal who acts as coordinator, and, to a lesser degree, all other faculty members. However, the work is professionally challenging and provides a healthy change of pace for both the staff and the pupils.

The regular turnover of college students in the school provides both the teachers and the pupils with a perpetual supply of fresh viewpoints and ideas. In addition, the Iowa School is helping to provide the public school with teachers who have first-hand knowledge of a field in special education which is not well understood by most teachers.

One incidental but very important additional benefit of the program is that it provides an excellent medium for recruitment of teachers of visually handicapped children. While the Iowa School's responsibility to the college will not ethically permit any concentrated direct effort at recruiting, the fact remains that the advantages of a career in teaching visually handicapped children become obvious to many student teachers. This leads some to seek employment in this field, or to seek further preparation for employment in this field. These efforts and intentions of such student teachers are cheerfully encouraged by the administration of the School.

Another value which cannot be measured accurately is the recognition the School receives as a center for student teaching. The program has helped to spread accurate knowledge of the nature and function of the Iowa Braille and Sight Saving School, of education of visually handicapped children in general, and of the various problems associated with blindness.

Throughout all the activities which are a part of the student teaching program, one principle remains paramount: *The welfare and the educational needs of the children in the school are of primary importance.* The pupils are not "guinea pigs" which college students "use" for

practice. The best professional experience a future teacher can have takes place in a situation where the needs of the children are always considered first.

It appears to be the feeling of all who are a part of the Iowa program that through it they are making a unique and significant contribution to the field of general education, as well as to the education of visually handicapped children and the Iowa Braille and Sight Saving School.

It is interesting, in the day of increasing decentralization of education of visually handicapped children, to see one state which is discovering a new dimension of the residential school. The search for and utilization of new applications of the many untapped but available resources inherent in these institutions point the way toward exciting new concepts of the purpose and function of residential schools everywhere.

*Problems of Placement**

By William R. Young, Director of Rehabilitation

Florida Council for the Blind, Tampa

I shall try to summarize Mr. Young's talk on "Problems of Placement" of his blind clients. It was a most informative talk given on the panel of Group G at the AAWB Convention in Miami on August 30, 1960.

Previous to Mr. Young's discussion, we heard two excellent papers—one on the Preschool Blind Child and the other on the Itinerant Teacher.

Mr. Young pointed out at the start that the best education be given to the student according to his ability. It does not matter whether the child is educated in a day set-up or residential school, so long as the individual is important and his education based on his ability.

Academic education is important and should be carried as far as possible, but it should be realistic. The student's limitations should be recognized and coped with, with proper adjustment on vocational training, for academic education alone cannot fully prepare a blind child for adult social and vocational competition.

Parents, family, and teachers should work together so that the blind child will move about with ease and confidence, that he will observe the social graces, and he will know how to keep himself properly groomed, etc. All this must be done before Rehab is approached and, if it is not done, rehabilitation is far more difficult. The family needs early counseling, for their attitude toward the blind child is most important.

An understanding of industry is just as important as a study of Latin, history, or algebra. Industrial arts is general education and is not primarily concerned with developing hand-skills. Its aims and objectives are:

1. To develop in each pupil an active interest in industrial life and in the methods and problems of production and exchange.

2. To develop in each pupil the appre-

*Presented at the 1960 AAWB Convention, Section G, and summarized for *The Journal* by Dr. Francis M. Andrews, Superintendent of the Maryland School for the Blind, and Chairman of Section G.

ciation of good design and workmanship and the ability to select, care for, and use industrial products wisely.

3. To develop in each pupil the habits of self-reliance and resourcefulness in meeting practical situations.

4. To develop in each pupil a readiness to assist others, and to join happily in group undertakings.

5. To develop in each pupil desirable attitudes and practices with respect to health and safety.

6. To develop in each pupil a feeling of pride in his ability to do useful things, and to develop worthy leisure-time interests.

7. To develop in each pupil the habit of an orderly, complete and efficient performance of any task.

8. To develop in each pupil an understanding of good planning.

9. To develop in each pupil a measure of skill in the use of common tools and machines, and an understanding of the problems involved in common types of construction and repair.

Keep in mind that we are working with an individual. Therefore, the aims of vocational education or vocational training are:

1. To develop skills.

2. To develop understanding of producer-consumer relations.

3. To develop understanding of employer-employee relations.

4. To develop an appreciation of vocations as they relate to society.

5. To conserve natural and human resources.

If a program is one of arts and crafts, the major aims here should be:

1. To develop worthwhile leisure-time activities.

2. To provide opportunities for creativeness.

3. To develop skills.

4. To develop good design and good taste.

5. To produce motivations.

Mr. Young went on to point out that vocational rehabilitation agencies have a responsibility to each individual. One must work with the schools without interfering with the academic preparation or any other preparation. It is however, of the greatest importance to have a smooth-working relationship and understanding with the student during his high school years. This is a relationship building confidence and interest, knowledge and ability of the rehabilitation agency in each student.

Vocational rehabilitation is nonmysterious, but it is designed in philosophy to assist severely handicapped people in selecting vocations in which they are interested and for which they have ability. It should not be narrow nor inflexible; otherwise, it is of little value. By the same token the education of the youngster must be flexible in philosophy and not hidebound or limited by tradition or habit.

It sums up then to a very cooperative working together, in a practical climate of mutual trust and high interest and devotion to accomplishing the objective, with the individual student's aim having the top billing and the feature role throughout the whole process.

Creating with Materials Can Be of Value for Young Blind Children

By Ina W. Kurzhals, Teacher

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The term *create* in the vernacular of modern education means more than making something beautiful for someone else to look at and enjoy. Russell expresses the thought that any true learning is creative if the individual solves a particular problem and adds the results of his own experience, thinking, and imagination to the material presented.[1]

Creativity is not limited to the talented nor to the adult. To create is an innate part of growth, and this ability should develop simultaneously as the child grows and develops.

To prohibit or interfere with the innate desire to express creatively can result in serious damage to the development of a healthy personality.

Lowenfeld in his CREATIVE AND MENTAL GROWTH, says:

> For the development of a healthy personality it is of utmost significance that a *proper balance be kept between emotional and intellectual growth.* If a child is found to be restricted in his creative expression and yet high on his intellectual level, he must be given more art motivation in order to achieve the mentioned balance. If a child is found to be rich in art expression but otherwise seemingly below his intellectual standard, he must be given help and confidence in his desire for intellectual achievements. Our present educational system suffers greatly from an overemphasis of intellectual growth. Learning, that is the acquisition of knowledge, almost exclusively stands in the focus of education. It is just as important for the child to gain freedom in expression as it is for him to get more knowledge. In fact, knowledge will remain unused, frozen, unless the child develops the urge and the freedom to use it.[2]

It is, then, a vital part of the educational system to provide for each child an environment in which he can grow in the ability to express his own thoughts and ideas in his own way and at his own level of development.

In considering the education of any handicapped group, one recognizes the same truths. In fact, greater significance should be given to them. Any handicap imposes restrictions on the individual. Restrictions lead to feelings of insecurity and lack of confidence.

Lowenfeld, in another part of his book, says:

> Since it is an established fact that nearly every emotional or mental disturbance is connected with a lack of self-confidence, it is easily understood that the proper stimulation of the child's creative abilities will be a safeguard against such disturbances.[3]

It is not difficult to understand the importance of helping children with the handicap of blindness achieve security and happiness through developing ways in which they can create and produce.

It is the author's desire to set forth some definite ways of acquainting blind children with many kinds of materials, and to present technics to these children that will help them to use their own ideas in working with materials.

The work with materials as described was done in the Kindergarten Department of the Utah School for the Blind. The children involved were between six and seven years of age. All were blind by the officially accepted definition of blindness, which is as follows:

[1]Russell, David H., CHILDREN LEARN TO READ (New York: Ginn and Company, 1949), p. 305.

[2]Lowenfeld, Viktor, CREATIVE AND MENTAL GROWTH (New York: Macmillan Co., 1952), pp. 35-36.

[3]Lowenfeld, op.cit., p. 6.

According to this definition, a child is blind if he has central visual acuity of 20/200 or less in the better eye, with correcting glasses; or central visual acuity of more than 20/200 if there is a field defect in which the peripheral field has contracted to such an extent that the widest diameter of visual field subtends an angular distance no greater than 20 degrees.[4]

This means that some of the children have low vision, and are able to use this vision as an aid in learning. Thus, many of the visual pleasures that sighted children enjoy can likewise be enjoyed by children with low vision. The instructor must not lose sight of the fact, however, that the goals established for creative work with blind children have a slightly different perspective than goals for creative work with sighted children.

For example, painting a picture for the sighted child is pleasurable because he sees his ideas having taken shape in a picture. Often for the blind child the fun is not the end product, but in the process. Finding powder paint in a dish, stirring water into the powder to change it into liquid paint, dipping the brush into the paint, and smearing it over a clay apple is exciting and fun.

This is not to say that the end product is not satisfying for the child who is blind, but it is to say that the emphasis is on the process and on the use made of the product.

In the development of the creative program for blind children the following goals were kept uppermost in mind:

Each child must derive pleasurable meaning from the activity. After a visit to an orchard, the children make clay fruit to be placed in a pretty dish for room decoration. It is meaningful at Hallowe'en time to save pumpkin seeds from the jack-o-lantern for necklaces and bracelets. Anything which the blind child does not have a definite use for has little meaning for him.

Each activity must be within the maturation of the child's development and must be within the background of his experience. Children pass through definite stages of development. There is an apt time when a child can benefit from what is being taught. To ask any child to engage in an activity too difficult or foreign to his background of experience is promoting failure. No concept or idea is clear unless the child has a background of experience to interpret the new activity, and each new experience must be within the maturation or readiness level of the child.

Each new activity must have the unique quality of arousing the child's desire to continue to create with materials. Even though some parts of an activity need the teacher's help, other parts can be done by the children individually. To make something by one's self to be used and admired gives confidence and security in one's own ability. One successful experience leads to another. No child should ever become frustrated because an activity is too difficult or is not meaningful to him.

The list of materials blind children can be helped to use is large. The following list is suggestive:

Paste	Cotton
Glue	Felt Board
Scissors	Cranberries
Construction Paper	Popcorn
Paper Jackets (cleaners)	Lollipops
Paper sacks	Metallics
Paper Cups	Artificial Snow
Cartons of all Sizes	Paper Doilies
Milk Carton Tops	Needles
Paper Cake Cups	Pins
Straws	Punch
Kleenex	Yarn
Crepe Paper	String
Wall Paper	Wire
Paper Plates	Pipe Stem Cleaners
Wax Paper	Punch Board
Aluminum Foil	Stylus
Butcher Paper (finger-paint)	Finger Paint
Tubes from Wax Paper	Powder Paint
Crayolas	Water Colors
Slate and Pencils	Paint Brushes
Cake Coloring	Plasticine Clay
Easter Egg Dye	Molding Clay
Shells from Nuts	Macaroni
	Beads of all Sizes
	Ribbons and Bows

[4]Lowenfeld, Berthold, OUR BLIND CHILDREN (Illinois: Charles C. Thomas, 1956), p. 9.

Sand	Jars of all Kinds
Buttons	Milkweed Pods
Fruit Jar Rings	Horse Chestnuts
Twigs from Trees	Leaves
Pumpkin and Squash Seeds	Flowers

The best approach to this developmental program in creative expression is through shape. Squares of different colored construction paper, 2½" x 2½", are placed in each child's tray. The square shape is recognized by four sides of equal length and four corners. The children learn to place one square on top of the other until a pile is made in a particular place in the tray. Straws cut in ½" lengths are added to the tray. The children discriminate between the straws to make long swings. Tapestry needles are used because of blunt ends and large eyes. Different ways of stringing the squares and straws are suggested. One child might string five straws to one square. Another might alternate a square, a straw, a square, a straw. Each swing is different, depending on each individual child's pattern. Large and small circles are used for variety. The children swing these strings to a number of different rhythms played on the piano or record player.

Other forms than squares are used later in the year. Dried squash and pumpkin seeds dipped in cake coloring are strung with colored cellophane straws for necklaces and bracelets. Different shaped macaroni adds variety to the necklaces. These necklaces and bracelets are placed in a box with cotton, and given to "Mother" for a gift.

Horse chestnuts are gathered in the fall. When these nuts first come out of their prickly shells they are soft and are strung in different lengths on cord. These strings are fastened together to form funny men, which are jiggled up and down to slow and fast rhythms. At Christmas, cranberries and popcorn are strung to make a Christmas tree interesting.

The concept of shape is also used to explain the meaning of pictures. On one of the fall walks the children pick large catalpa leaves. Catalpa leaves are used because of the simple shape. The children examine the leaves, noting the characteristics peculiar to them. Cardboard patterns of identical catalpa leaves are given to the children. They learn that the pattern is the same shape as the real leaf. A piece of different colored construction paper is given to each child. Comparison is made between the pattern of the leaf and the shape of the paper. The construction paper is placed on a large punch board, and the leaf pattern is pinned to the paper. Each child uses a Braille stylus to punch around the pattern. When the picture is punched, a comparison is made between the picture and the real leaf. The children learn that the paper leaf is a picture of the real leaf because it is the same shape. Each child pins his picture on the low display wall with his name Brailled to identify his own picture for him. It is important to him to find his own picture to show *visitors*. Some children find using a stylus difficult at first, but holding the child's right hand with the stylus while he follows around the pattern with his left index finger will aid the child in the beginning use of the stylus.

After having learned to make pictures of leaves, the children then gather flowers from the garden. They learn that many flowers are round in shape and the circles of different sizes can be punched out. The children cut the edges of the circles from the outside toward the center. The cut edges are folded forward and backward to look like petals. The circles are then fastened to a green paper straw and placed in a paper cup of sand to hold the artificial flower in an upright position. Aluminum foil is crushed around the cup for interest. Each child has his own flowerpot to place on shelves in the room library.

Pictures of trees are developed after the children have had experience with evergreens at Christmas time. Making pic-

tures of leaves, flowers, and trees follow the experience of the child with these things.

Creating valentines of different colors and sizes can follow the children's previous experience with shape. The smaller valentine is glued on top of the bigger valentine. Children learn to put the index finger into the small cup of paste and smear one side of the small valentine. Lollipops, or paper lace doilies with bows, are fastened in the middle of the smallest valentine. The children choose the decoration they wish.

To prepare for making other shapes, the children are taught to use scissors. The easiest way to introduce them is to help children cut narrow strips of paper. Holding the scissors in correct position is difficult. Scissors must be easily opened and closed, and the blades must be tight enough to cut paper. Children need much practice in cutting.

Young children like to make piles of small pieces of paper and sprinkle the pieces over a large sheet covered with paste. It is fun to discover how many pieces stick to the big sheet.

When the children can use scissors, doilies are made by folding paper in many different ways and cutting small bits out of the folded paper. Children learn that with every fold the shape of the paper is changed. On opening the paper, the children find the holes made by the scissors. Fringe is cut around the outside of the paper doilies. Plants and figurines are placed on the finished doilies.

The experience making these doilies prepares children for place mats. Mats call for larger pieces of construction paper. Children fold the paper in a variety of ways and cut along the folds. Each child uses his own mat each day for lunch. For a Halloween or Valentine party, the white cut-out mats are pasted on orange or red paper.

From the ideas developed about shape, children at Halloween time are helped to make funny masks out of paper plates. Each child chooses the kind of cut-out eyes, nose, and mouth he wishes. One might ask for a triangular shape nose, a cranky mouth, and round eyes. Paper sacks are folded to make hats. Paper jackets from the cleaners are used for costumes. The children help cut out holes big enough for heads and arms to go through. Fringe is cut around the bottom to add to the fun of making the costume. Dressed in these noisy, paper outfits they helped to make, they visit the children in other rooms of the school.

Children enjoy taking a paper punch and making holes at intervals all around construction paper. Yarn is woven in and out of the punched holes. These, likewise, are used for mats or doilies.

Working with clay is invaluable for blind children.

Charlotte Haupt in an address delivered at the Arts and Crafts Workshop, Hunter College, July, 1958, says:

> It is therefore my contention that imparting firsthand knowledge of all common objects about us is our first job as teachers of blind children. When the objects are not to be had, each instructor should have enough of a basic facility with clay to be able to model them (in three dimensions). There is a reason for the shape of things and, if the reason for an object's shape (always connected with its function) is explained, then the child can more easily remember the form. Each child should also be taught how to handle the clay so that he may copy the object and, while doing so, he will have time to form a mental image of it.[5]

Children begin to work with plasticine clay—rolling, poking, pinching, pounding, squeezing, and picking it. They flatten the clay and call it cookies, or roll it into long snakes. Some make small nests and fill the nests with eggs. When real clay is introduced, children experiment with it in the same way. Since the children have a background in making something that looks like something else, the suggestion that a fall display using clay fruit and

[5]Haupt, Charlotte, "Clay Modeling — A Means and an End," AFB Publications, Concerning the Education of Blind Children, No. 12 (June, 1959), p. 67.

vegetables is met with enthusiasm. Each child chooses the fruit or vegetable he wishes to make. Again the characteristics of the thing to be made are reviewed. When the molding is finished, a small dish of water is given the child. He is taught to dip the index finger into the water and carefully go all over the object to smooth out the rough parts. When the clay is dry, the children are helped to paint the objects the correct color. Small brushes and small dishes of powder paint work well. A display table is arranged with milkweed pods, nuts, berries, and clay fruit and vegetables to give the children something to look at for several weeks.

Clay work is continued at Christmas. By shaping the clay into a round ball, the children press the end of a Christmas candle into the ball to make a candle-stick holder. When the clay is dry the holder is painted with gilt. A ribbon bow tied on the candle makes a nice gift for Mother. Clay trees are made for a paper weight for Father. After the trees are painted and dry, the children brush glue lightly over the tree to hold the different colored metallics. The children use a salt shaker to sprinkle metallics on the trees.

For a winter display table, clay snowmen are placed on cotton along with short tree twigs painted white and stuck in clay stands to hold them upright. Artificial snow is sprinkled over the cotton to give the children added textures to examine.

For Easter, clay rabbits and chickens are modelled. The rabbits and chickens are placed in artificial grass with colored Easter eggs and placed on the table.

Children prepare the eggs for boiling. When the eggs are hard a few drops of liquid coloring dropped into a bowl of cold water into which the eggs are dipped is the easiest way to color them.

Folding paper to make different objects is interesting for children. Children are helped to fold paper to make boxes for crayolas. These boxes turn into wagons by fastening four round tops from milk cartons to the bottom and cutting a slit for the wagon tongue. May baskets and Easter baskets are easily folded out of paper. Newspapers and crepe paper make soldier hats. Strips of different lengths of paper are folded to make bunnies.

Strips of paper folded and pasted together make bracelets. Long chains are made by pasting one circle with another.

The materials used to make all these shapes are left in available places for children to get and experiment with. There is really no limit to the materials that blind children can use and enjoy.

It has been said that the success of a teacher can be gauged by the degree of happiness shown by the pupils. Perhaps there is no greater way to insure happy children than to provide an environment in which they can explore and create.

BIBLIOGRAPHY

1. Haupt, Charlotte. "Clay Modelling — A Means and an End". Concerning Education of Blind Children. A.F.B. Publications. New York; 1959
2. Horowitz, Caroline, Play Ideas and Things To Do. New York; Hart Publishing Company
3. Lee, Tina. What to Do Now. New York. Doubleday and Company, 1946
4. Lowenfeld, Berthold. Our Blind Children. Springfield; Charles C Thomas, 1956
5. Lowenfeld, Viktor. Creative and Mental Growth. New York; Macmillan Company, 1952
6. Russell, David, H. Children Learn to Read. San Francisco: Ginn and Company, 1949

A Comparison of the Oral and Written Methods of Administering Achievement Tests

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The STANFORD ACHIEVEMENT TESTS, FORM J, for use with blind and partially seeing pupils, Grades II through X, were made available for use in 1955. The Braille and large type editions were prepared by the American Printing House for the Blind following adaptations suggested by Samuel P. Hayes, Ph.D. Since that time, the other forms of the J Series have been prepared in Braille and large type. The adaptations in the structure of the tests have been made only in the Braille editions, and the Braille and large type editions have modifications of the time limits for administration. Both forms are scored on the basis of normative data established on representative populations of normally seeing pupils.[1]

In the Braille edition[4] of these achievement tests, only in the Paragraph Meaning, Language, Arithmetic Reasoning (Primary and Elementary Batteries, and Part I of Elementary and Intermediate Batteries) are the full text of the printed materials prepared in Braille. In all the other sub-tests, including Part II of the Arithmetic Reasoning (at the intermediate and advanced levels), only the alternate choice response items are prepared in Braille. In these latter sub-tests, the content material of the test is read to the pupils by the classroom teacher, with each pupil having the opportunity to attempt each item on the test. On the entire Braille test, the blind subject indicates his selection of one of the alternate choice responses by making a mark through the Braille response with a stubby pencil. When the tests are scored, a deduction is made from the pupil's grade scores in the Word Meaning and the Science tests at the intermediate and advanced levels; otherwise, normal scoring procedures, as with seeing subjects, are used, and the normative data for seeing subjects is used to provide the final grade equivalent scores or percentile scores.[2]

It was the feeling of the authors that the use of normative data for the seeing with the foregoing modifications of administration and scoring was invalid. The norms for the seeing were established upon standard procedures in which all students did not have the opportunity to attempt all items, as is the case with the "Oral Administration" for blind students. In addition, when the entire text of a subtest was prepared in Braille, the time limits were increased by a factor of 2½. The factor of 2½ was determined by a study that compared rates of reading Braille with rates of reading print in 1938, at which time the Braille used was grade 1½. The current STANFORD ACHIEVEMENT TESTS are prepared in grade 2 Braille which, having more contractions, is faster reading than grade 1½ Braille.[3]

Thus, it became apparent that there were several aspects of the Braille edition of the STANFORD ACHIEVEMENT TESTS, FORM J SERIES that needed investigation to determine the validity of the use of

normative data for seeing subjects: (a) Would there be a significant difference in scores if students took a given sub-test by alternate methods (1—oral, 2—entirely in Braille); and (b) If the tests were Brailled in their entirety, would the existing time limits provide for an equivalent number of items attempted, items passed ratio as was determined for seeing subjects in the original normative group.

A decision was made to first conduct a pilot study with one sub-test from two different forms to be given: (a) by means of oral administration; and (b) by means of having the test Brailled in its entirety. The Word Meaning sub-test was chosen for the pilot study and the tests from FORM K and FORM M were compared and found to contain no duplications of content material. THE FORM M Meaning Test was then prepared in its entirety in Braille in the Intermediate and Advanced levels. These tests were then administered to fifth through ninth grade pupils in the Maryland, North Carolina, and Perkins Schools for the Blind. In each school FORM K was being administered; at the time of the normal achievement testing in the schools, the FORM M written Word Meaning Test was substituted for the FORM K oral Word Meaning Test. One week following the original administration of the written FORM M, the FORM K oral Word Meaning Test was administered. A total of 336 Braille readers were included in this initial study. The results of the analysis of variance for repeated measurements of the same subjects are shown in Table 1.

Discussion: Table 1 indicated that the difference between scores obtained by written and oral methods was significant. The oral method produced the higher scores. However, these differences were significant only in the case of the lowest grade at each level of the test. In addition, it was determined that the corrections for adjusting grade scores obtained by the oral method following Hayes' directions would have reduced the subject's scores below those scores obtained by the written method.

TABLE 1

COMPARISON OF MEAN SCORES OBTAINED BY ORAL AND WRITTEN METHODS OF ADMINISTRATION OF THE WORD MEANING TEST, STANFORD ACHIEVEMENT TEST, FORMS K AND M.

Grade	N	Form K Mean	Form M Mean	Mean Difference
Intermediate Level				
5	37	35.73	30.86	4.87*
6	36	37.00	36.96	.04
Total				4.91*
Advanced Level				
7	29	28.10	21.97	6.13*
8	27	36.78	37.11	— .33
9	39	37.49	35.41	2.08
Total				7.88*

*Differences are statistically significant at the .01 level of confidence.

Conclusion: The authors feel that the results of this study indicate the desirability of conducting further more extensive studies to adjust the scoring techniques of the Braille STANFORD ACHIEVEMENT TESTS and to adjust the time limits so that Braille readers taking these tests will be attempting the same number of items per sub-test as their seeing counterparts will be doing on the regular print form of the test.

REFERENCES

1. Kelly, T. L. *et al*, STANFORD ACHIEVEMENT TEST; DIRECTIONS FOR ADMINISTERING, World Book Co., Yonkers-on-Hudson, N. Y., 1953.
2. Hays, S. P., STANFORD ACHIEVEMENT TEST, BRAILLE GRADE 2 EDITION, American Printing House for the Blind, Louisville, Ky., 1956.
3. _____NEW METHODS OF TESTING THE SCHOOL ACHIEVEMENT OF BLIND PUPILS, *Outlook* 37: 277-282, Dec., 1943.
4. Edwards, A. L., EXPERIMENTAL DESIGN IN PSYCHOLOGICAL RESEARCH, Rinehart and Co., New York, 1950.

Legibility of Ink and Paper Color Combinations for Readers of Large Type

By Carson Y. Nolan, Ph. D., Director, Educational Research

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Introduction

As a result of the early research[1] conducted by personnel of the Cleveland Public Schools, it was decided that black print on light buff or cream paper was best for large type books. Use of this combination has continued until recent years, when one publisher of large type material has adopted an off-white color paper.

Several researchers have investigated the comparative legibility for normal readers of various ink and paper-color combinations. Preston, Schwankl and Tinker[3] studied distance recognition thresholds for words printed in a variety of combinations. They found ink and paper-color combinations legible in the following order: (1) blue ink on white paper, (2) black on yellow, (3) green on white, and (4) black on white. In another study[4], Tinker and Patterson found that materials printed in green on white, blue on white, and black on yellow were read from 3 per cent - 4 per cent more slowly than materials printed in black on white. Luckiesh and Moss[3] compared speed of reading and ease of reading for black print on 4 papers: white, fairly saturated yellow, light buff, and reddish orange. They found black on white gave the best reading speed and that light buff paper ranked highest in ease of reading.

The goal of the present study is to check some of these findings using a partially sighted group. Its purpose is to investigate the comparative legibility of blue and black print on papers of five different tints.

Procedure

Subjects: Included were 12 boys in grades 5-11 of the Kentucky School for the Blind. All were large type readers. Ages ranged from 11-17 years. Visual acuity for the better corrected eye ranged from 20/50 - 15/200 with a median at 20/200. A variety of types of visual disability was represented.

Experimental Materials: These consisted of paper circles around the periphery of which were printed 18 Landolt rings. The Landolt rings were printed in Job Black

TABLE 1

DESCRIPTIVE STATISTICS* FOR SIZE DISCRIMINATION THRESHOLDS FOR THE GROUP ON 10 PAPER-INK COLOR COMBINATIONS.

	PAPER									
Ink	*Mean*	*S.D.*	*Mean*	*S.D.*	*Mean*	*S.D.*	*Mean*	*S.D.*	*Mean*	*S.D.*
Black	7.77	3.04	7.77	2.91	7.83	2.68	7.73	3.25	7.29	3.45
Blue	7.64	2.69	8.02	3.15	7.54	2.79	8.00	3.32	7.92	3.30

* expressed in sixty-fourths of an inch.

and Lustre Blue ink on the following papers: Sunray Opaque Vellum (white); Suede Book (off-white); India (light buff); Maxwell Offset (ivory); and Moraine Index (canary). The opening in the largest Landolt ring was 18/64 inch wide. The over-all dimensions of the targets were photographically reduced so that openings of successive rings were diminished in steps of 1/64 inch, with the smallest opening being 1/64 inch. The direction of the opening was varied through 8 equally spaced circular positions.

Apparatus: The apparatus was constructed to provide for exposure of the targets at a distance 175 cm. from the plane of the eyes. Head position was held constant through use of chin and forehead rests. The subjects viewed the target through a slit 5 cm. x 13.5 cm. which was cut in a black opaque screen. The target was exposed through an aperture (diameter 4.3 cm.) cut in a screen of the same type paper as the target. This screen (12.5 cm. square) was mounted on a black background. The screen was illuminated by two Westinghouse 6W cool white 8 inch fluorescent bulbs mounted vertically on either side of the paper screen. The bulbs were shaded so that no light shone directly on the subjects. The size of the target was varied by the experimenter manually rotating a wheel upon which the target circle was mounted.

Experimental Method: The task for each subject was to identify correctly the circular position of the opening in the Landolt ring. The criterion, therefore, was one of size discrimination. A trial was started with the target opening size well above threshold. The size of the target was reduced through successive steps until the subject was unable to correctly state the position of the opening. Each subject received 4 trials for each of the 10 paper-and-ink-color combinations. For each combination, 4 paper circles were used with the position of the sucessive target openings independently-randomized for each. The order of the paper circle presentation for each color combination and the order of presentation for combinations were randomized for each subject. All randomizations used in the study were determined through use of tables of random numbers.

Results

The data were cast in a treatments x treatments x subjects design and an analysis of variance completed. Mean size recognition thresholds and their standard deviations for each paper-ink color combination are reported in Table 1. As may be seen by inspection of this table, means size recognition thresholds were quite similar. Analysis of the differences between means for combinations revealed no significant differences. Results of this analysis are presented in Table 2.

The empirical results indicate, therefore, that under the conditions of the experiment all paper-ink color combinations were equally legible for the large type readers who comprised the group. However, subjective observations indicated

TABLE 2

RESULTS OF ANALYSIS OF DIFFERENCES BETWEEN MEANS OF THE TEN PAPER-INK COLOR COMBINATIONS.

Source of Variance	*df*	*Mean Square*	*F**
Ink	1	2.00	.85
Paper	4	1.25	.28
Subjects	11		
Ink x paper	4	3.25	1.75
Ink x subjects	11	2.36	
Paper x subjects	44	4.45	
Paper x ink x subjects	44	1.86	
Within groups	360		
Total	479		

* None of the F-ratios reached signficance at the .05 level of confidence.

that subjects made more effort to see some combinations than others and that differential fatigue effects may be involved. Legibility of combinations may differ among types of visual disability, i.e. the albino in the study objected to the very white paper. Other individuals also expressed dislikes, with the canary paper most frequently mentioned in this category.

Summary

Size discrimination thresholds were obtained through repeated measurement of 12 large type readers using targets printed in combinations of two ink and five paper colors. Results revealed no significant differences in legibility among the various combinations.

REFERENCES

1. Hathaway, W., Education and Health of the Partially Seeing Child. New York, Columbia University Press, 1954, 104-107.
2. Luckiesh, M. and Moss, F. K., "Visibility and readability of print on white and tinted papers." *Sight Saving Review*, 1938, 8, 123-134.
3. Preston, K., Schwankl, H. P., and Tinker, M. A., "The effect of variations in color of print and background upon legibility." *J. gen. Psychol.*, 1932, 6, 459-461.
4. Tinker, M. A. and Patterson, D. G., "Variations of color of print and background" *J. appl. Psychol.*, 1931, 15, 471-479.

AAIB Membership Drive-1961

By Walter E. Evans*

National Membership Chairman

It is interesting to note the growth in membership in the American Association of Instructors of the Blind during the past few years. Just what is the reason for this growth?

First, the AAIB has a program of which we can all be proud—a program which now continues through workshops set up to assist the many areas of the blind between convention dates. The program is one of value, not only to the residential schools, but public school programs, state departments of education, colleges and others working with the education of the blind.

Second, the services provided have been greatly increased during the past few years, especially since we have an out-

Note: Mr. Evans is Principal of the Missouri School for the Blind

standing, wide-awake, enthusiastic Executive Secretary, who is willing and ready to tackle the work of our organization with courage and foresight.

Third, the plans for the future of our organizations are such that, with our interest, cooperation and effort, there is virtually no limit to what we can accomplish.

Fourth, *The International Journal for the Education of the Blind*, which is included with your membership, has increased in size, as well as in the number of worthwhile articles and ideas on the education of the visually handicapped. People connected in any way with the education of the blind or partially sighted children cannot afford to be without this journal.

AAIB membership is open to any person affiliated with or interested in an organization engaged in any way with the education of the blind or partially sighted. Membership dues are $6.00 per year for 1961 (January 1 to December 31.) This includes not only *The Journal*, but a copy of the convention PROCEEDINGS (during Convention years), and a copy of the *AAIB Monthly Newsletter*—the last two are obtained by special request.

Your AAIB Membership Committee is as follows:

Walter E. Evans .....National Chairman
Missouri School for the Blind
3815 Magnolia Ave., St. Louis 10, Mo.

Mrs. Jerrine M. Lucas
Public School Program
Roosevelt School
951 Dowling Blvd., San Leandro, Calif.

Mr. Charles Weir .....Houseparents
Michigan School for the Blind
Lansing, Mich.

Miss Elinor Long
Depts. of Education and Special Education
Dept. of Public Instruction
Harrisburg, Pa.

Mrs. Willie Bennett .....Parents
Arkansas School for the Blind
2600 W. Markham, Little Rock, Ark.

Miss Jeanne Kenmore
Colleges & Universities
Pattee Hall, 15-A
University of Minnesota, Minneapolis, Minn.

Mr. Carl Davis .....Life Memberships
Perkins School for the Blind
175 N. Beacon Street, Watertown, Mass.

Dr. Everett E. Wilcox
American Foundation Personnel
American Foundation for the Blind
15 W. 16th Street, New York, N. Y.

The first week in January, when this article was prepared, our total membership in AAIB was 1462, more than 100 greater than at this time last year and as great a membership as at the end of our convention, June, 1960. A summary of the membership follows:

48 Residential Schools	
(a) Professional Staff	1036
Houseparents	186
Public School programs	105
Life Members	11
Private Agencies	23
Parents	13
College Students	17
Special Education Depts.	6
State Agencies	4
College Personnel	8
Libraries	6
Hospitals	1
Corporations	46

The following schools for the blind have 100 per cent AAIB membership of both professional and houseparents staff:

Iowa
Kansas
Kentucky
Oklahoma
Maryland
Missouri
Western Pennsylvania

At present there are 23 residential schools for the blind who have 100 per cent membership of the professional staff. More schools will be on the 100 per cent

membership honor roll. Why not see that your school has 100 per cent membership for 1961?

The six states with the greatest number of nonresidential AAIB members are:

Illinois	21
California	17
Michigan	15
New Jersey	14
New York	10
Ohio	10

The five residential schools with greatest number enrolled are:

Perkins	92
Maryland	62
North Carolina	61
Western Pennsylvania	48
Iowa	44

Five colleges are represented in the AAIB membership.

The American Printing House has 100 per cent professional staff membership again this year.

We have made a fine start on the 1961 membership drive. Our goal for the year has been set at 1600 — help us top this. It is not too late to enroll as a member in AAIB. Send your dues to Mr. Maurice Olsen, Executive Secretary, AAIB, 2363 S. Spring Ave., St. Louis 10, Mo., as a school, organization or individual. You can still receive the March, 1961 issue of *The Journal* if you enroll in the near future. Take it upon yourself to contact and encourage your friends, who are affiliated with or interested in the education of the visually handicapped, to become AAIB members this year. I am sure that there are many working in the education of the blind who are not aware of all we have to offer them. We hope to materially increase the membership among public school personnel this year. We should also enroll more houseparents, parents, college students in special education programs, agencies working with the blind, colleges, and library personnel interested in the education of the blind.

We are quite pleased with our AAIB membership to date, but are not satisfied to stop now. There are many more prospects who should become members. Let every AAIB member assist in promoting our membership drive and thus make 1961 an outstanding year for AAIB.

Ideas and suggestions on membership should be sent to your National Membership Chairman.

Dates to Remember

1961

March 16-22 Inter-American Conference on Work for the Blind, Guatemala City, Guatemala.

April 4-7—American Industrial Arts Association Convention, St. Louis, Missouri. (Oswego Workshop on Industrial Arts for Blind Children is included in program; Industrial Arts AAIB Workshop will meet in connection with the Convention at the Missouri School).

April 12-14—Annual Conference of National Society for Prevention of Blindness.

May 5-6—Eastern Region Annual Music Festival of Schools for the Blind, Oak Hill School, Hartford, Connecticut.

May 10-12—National Braille Club 4th National Conference, Conrad Hilton Hotel, Chicago, Illinois.

May 13—EAAB Track Tournament, Perkins School for the Blind, Watertown, Massachusetts.

June 19-July 7—Ohio School for the Blind Workshop for Teachers, Ohio School for the Blind, Columbus, Ohio.

June 19-23—San Francisco State College for Teachers and Administrators of Programs for Blind Children Workshop, San Francisco, California.

June 22-24—National Workshop for Parents, Missouri School for Blind, St. Louis, Missouri.

June 30-July 1—Ohio School for the Blind Houseparents Workshop, Columbus, Ohio.

July 9-14—AAWB Convention, St. Louis, Missouri.

July 17-21—Chapel Hill Workshop for Houseparents, Chapel Hill, North Carolina.

1962

June 28-July 2—AAIB Convention, Deauville Hotel, Miami Beach, Florida.

July 8-13—AAWB Convention, Cleveland, Ohio.

August 6-18—ICEBY Conference, Hanover, Germany.

The President's Corner

By Miss Lois V. Cox, President
American Association of Instructors of the Blind

Quantity and Quality

Educators of visually handicapped children, in line with the national goals and standards of education, have combined forces to provide quality education for *all* visually handicapped youth. The magnitude of the job and the immediacy of the need demand a unified approach. There is evidence of constantly increasing cooperative action in the field of education of visually handicapped children.

Research is under way which will make it possible to provide better teaching materials and equipment faster and to improve the methods of teaching the basic skills. The American Printing House for the Blind, the American Foundation for the Blind and the American Association of Instructors of the Blind are constantly working at the national level to determine research needs and to promote research projects. Quality must not suffer in the effort to meet the needs of a larger segment of the population for individualized education, starting earlier, extending longer, and placed to meet the needs of all.

Efforts have been increased to recruit more teachers to the field of special education, and teacher-training programs are being established to better serve all sections of the country. Certification requirements are being raised to promote professional growth of those already in the field through in-service training, refresher courses and advanced study. The American Foundation for the Blind, the American Association of Instructors of the Blind, colleges and universities are cooperating in this effort.

The Conference for Regional Librarians of the Blind, held in Washington, D. C. in October, brought in resource people and speakers from about eleven sources to acquaint the librarians with national needs and help them to improve their services in supplying reading materials for the visually handicapped in Braille, on Talking Book records and on tapes.

The Council for Exceptional Children Regional Meetings included on their programs panel discussions by outstanding educators on problems involved in teaching multiply-handicapped children, and educational research being done in the area of the partially sighted child.

The Second National Conference on the Preparation and Distribution of Text Materials for Blind Children was held in Louisville, Kentucky, in November. More than forty professional and volunteer workers were invited by the APH and the AFB to make plans and assume responsibility for producing and distributing text materials in Braille, large type, on records and on tapes.

The AFB, at a Follow-up Conference in New York in February, worked on guide lines to help administrators, at the state level, to make maximum use of educational materials.

By continuous, concerted effort, educators in the field of the visually handicapped are working toward the goal of providing quality and quantity in research, in teaching and in teaching materials for the education of all visually handicapped children.

The University of Birmingham Course for Training Teachers of Blind Children

By Miss Myfanwy Williams, Dip. Ed. Psych., Dip., College of Teachers of the Blind
and
Tutor-in-charge of Course for Teachers of the Blind

The University of Birmingham, in England, offers a course of one session for preparing teachers of blind children. The course, which extends from the last week of September to mid-July, leads to the award of a Supplementary Certificate for Teachers of Blind Children.

Candidates for admission to the course must be qualified teachers, and it is strongly recommended that they shall have had at least two years' teaching experience with normal children. In addition, it is thought desirable, although it is not mandatory, that they shall also have had some teaching experience in a school for blind children.

The aim of the course is to give practice in the art of teaching blind children and to afford opportunity for a scientific study of their education. Since it is not possible to study education of the blind in isolation, due consideration is given to the areas of educational psychology, social psychology, and child development. In brief, there are two aspects to the course: one includes a study of the needs and characteristics of normal children, while the other emphasizes the special needs of blind children and the significance of these needs for educational methods.

The course in Educational Psychology consists of lectures and discussions on the theories of learning and their applications to classroom situations. Attention is given to the processes of perception, imagery, concept formation, retentivity, thinking, problem-solving and school records. Experimental work is undertaken concurrently with the lectures, which are linked with various research projects in the department of education.

The course in Child Development includes lectures, films and visits to nursery, primary and secondary schools.

Two series of lectures form a bridge, as it were, between the general and particular aspects of the course. The one deals with personality development and deviations that may occur, while the other presents the educational provisions existing for blind children.

The subjects covered in this first series include the concept of normality, the understanding of personality problems, psychological processes of adjustment, and the common maladjustments of childhood and adolescence. There is, in addition, a survey made of the work of child guidance centres and clinics.

The second series emphasizes the problems of handicapped children in general and ways of promoting their personal and social adjustments. Lectures in this area are provided by headmasters and others who have knowledge and experience in at least one area of handicap. Such lectures have a high practical value, presenting as they do a picture of the community and educational activities within the various schools. Each of these lectures is followed

by a visit to one or more schools catering to the particular handicap under discussion. Such schools include those for the blind, the partially sighted, the deaf, the physically handicapped, the mentally handicapped, and the maladjusted.

The part of the course bearing directly upon the education of blind children has both a theoretical and a practical aspect. Students spend the first week of the course at various schools for blind children. It is at this time that observation is directed towards the study of the child, rather than techniques and methods of instruction. Students then embark upon their work at the University with a high degree of enthusiasm as a result of this initial, vital experience.

A series of lectures on the psychology of blindness includes the consideration of sensory perception, the substitution of the senses, differences between touch and sight, touch discrimination, the kinaesthetic sense, and obstacle perception. These lectures are linked as closely as possible with current research, and students are encouraged to carry out small enquiries.

Another series of lectures considers the intellectual and emotional development of the blind child. Attention is given to a consideration of his needs at subsequent phases of childhood and to the need for preparing him for successful adjustment to living in a sighted community.

A portion of the course is devoted to a study of intelligence tests and testing for the blind. This includes a study of the historical development of testing for this group, with particular emphasis on the contributions of the late Dr. S. P. Hayes in American schools for the blind. The aim is to teach the students to interpret and use the test information supplied in case records, and to provide them with knowledge concerning the administration of these and other tests of assessment. Test demonstrations, using the WILLIAMS INTELLIGENCE TEST for Children with Defective Vision, are presented and the results interpreted.

The topics dealing with the education of blind children are presented by a large number of visiting lecturers. Included are various teacher specialists who provide information on methodology, and an ophthalmologist who discusses the medical aspects of blindness.

A vital part of the course is the practical work taken at the University Child Study Department. Here the students are given the opportunity of working with individual pupils in various constructive and leisure-time activities. Before students begin this individual work, case conferences are held, with each receiving as much information as possible about "his" child. Such information includes home background and family data, the results of testing, standards of attainment, social behavior, and ophthalmological information. The daily work sessions are followed by meetings among the students, the psychologist and the psychiatric social worker. These are for the purpose of discussing the achievements and attitudes of pupils. As an additional follow-up, the students submit weekly written reports on the progress of their pupils. It is hoped that this individual work with pupils will impress students with the importance of attitudes and motivation in learning.

Students are required to submit a dissertation based on practical investigation of some topic related to the education of blind children. A few recent investigations have included enquiries into the number concepts of young blind children, the visual reading of Braille (with sighted subjects), the possible relationship between tactual discrimination and manual dexterity, and the attitudes of blind adolescents towards their blindness.

The above dissertation, plus a series of written examinations, constitute final course requirements.

Summer Courses for 1961 for Teachers of the Visually Handicapped

Hunter College of the City of New York, New York City

June 30 - August 11

Principles and Methods of Teaching the Blind, Part I

Principles and Methods of Teaching the Blind, Part II

Theory and Techniques of Reading and Writing Standard English Braille, Grade II (two related courses offered)

Anatomy, Physiology and Hygiene of the Eye in Relation to Sight Conservation Classes

For further information write: Dr. Elena D. Gall, Coordinator, Special Education, Special Education Office, Hunter College of the City of New York, 695 Park Avenue, New York 21, New York.

University of Minnesota, Minneapolis, Minnesota

June 12 - July 15—First Term

July 17 - August 19—Second Term

During the *first term* a "full sequence" of courses will be available to teachers of partially seeing and/or blind children. These include:

Introduction to the Education of Visually Handicapped Children

Braille I (Beginning)

Braille II (Advanced)

Methods of Teaching Blind Children in Elementary Grades

Methods of Teaching Blind Students in Secondary School

Methods of Teaching Partially Seeing Children

Structure and Function of the Eye; Educational Implications

Graduate Practicum (Student Teaching)

Junior Practicum (An Observation Course)

A Demonstration resource room for blind and partially seeing children will be in operation at the Tuttle Laboratory School.

During the *second term* (the first four of the five-weeks' term) there will be a course on Orientation and Mobility for Blind Children which will be held on the Duluth Campus of the University of Minnesota. Limited registration. Application for admission may be made to Miss Jeanne R. Kenmore, 15A Pattee Hall, University of Minnesota. For further information about courses write: Miss Jeanne R. Kenmore.

George Peabody College for Teachers, Nashville, Tennessee

June 12 - July 15—First term

July 17 - August 18—Second term

Full summer sequence of courses for teachers of blind children, in two sessions.

July 5 - July 15—Special Advanced Workshop conference for teachers of the partially seeing—Coordinator: Miss Helen Gibbons, Consultant in Education, National Society for the Prevention of Blindness. (Open to career teachers of the partially seeing who identify a special topic of individual interest to develop in the workshop). (Scholarships for the workshop are available from the National Society for the Prevention of Blindness, and applications

should be sent to S. C. Ashcroft, Coordinator, Preparation of Teachers of Visually Limited, George Peabody College for Teachers, Nashville 5, Tennessee).

For further information on all courses and workshop, including scholarships from various sources, write: Dr. S. C. Ashcroft, Coordinator, Preparation of Teachers of Visually Limited, George Peabody College for Teachers, Nashville 5, Tennessee.

San Francisco State College, San Francisco, California

June 19 - 23: (Intersession): The Administration of Programs for the Visually Handicapped. A One-Week Intensive Course for Administrators

July 10 - August 7 (Special Workshop): For Direct Service Personnel Who Work with Emotionally Disturbed Blind Children

Potentialities and Problems of Severely Disturbed Blind Children

The course is designed for administrators, psychologists, teachers and social workers who have a responsibility for (1) evaluating blind children who present severe problems, and/or (2) developing programs of service for these children.

June 26 - August 7 (Regular Summer Session):

Observation, Clinical Methods and Clinical Practices with Exceptional Children (Visually Handicapped)

Student Teaching with Exceptional Children (Visually Handicapped)

Student Teaching Seminar in Special Education

Structure and Function of the Eye

Survey of Education of Visually Handicapped

Principles and Methods — Partially Seeing

Principles and Methods — Education of the Blind, Including Beginning Braille

Advanced Braille

Advanced Problems in the Education of the Visually Handicapped

For Further Information write: Miss Georgie Lee Abel, Professor of Education, Dept. of Special Education and Rehabilitation Counseling, San Francisco State College, 1600 Holloway Avenue, San Francisco, California.

Syracuse University, Syracuse, New York

July 5 - August 11

Education of Partially Seeing Children (Theory)

Education of Partially Seeing Children (Practice)

Eductional Implications of Visual Impairments

Student Teaching with Blind Children

Principles and Methods of Teaching Braille

Introduction to the Education of Blind Children

Advanced Problems in the Education of Blind Children

For further information about courses write: Miss Lois E. Stryker, Administrative Assistant, Division of the Summer Sessions, Syracuse University.

Wayne State University, Detroit, Michigan

June 26 - August 4

Methods and Procedures in Educating Partially Seeing Children
(includes visits to eye clinics and participation in laboratory-demonstration class)

Pathology of the Organs of Vision
(includes clinical observations and demonstrations)

NOTE: Upon application, the Department can grant "waivers" of nonresident tuition for as many as twenty-five students each summer session.

For further information about courses write: Dr. John J. Lee, Chairman, Department of Special Education and Vocational Rehabilitation, College of Education, Wayne State University, Detroit 2, Michigan.

The University of Wisconsin; State Department of Public Instruction, Bureau for Handicapped Children; Wisconsin School for the Visually Handicapped

July 17 - August 11

Workshop at Wisconsin School for the Visually Handicapped, Janesville. Methods and Procedures in the Education of Blind Children with Multiple Handicaps.—Lectures and Demonstration Class.

NOTE: A limited number of scholarships are available to cover the costs of tuition and lodging.

For further information write: Dr. Rick Heber, Coordinator, Special Education, Department of Education, The University of Wisconsin, 502 State Street, Madison 6, Wisconsin.

Dr. Quimby Elected to Wrestling Hall of Fame

(from the "Physical Education Bulletin" of the AAIB Physical Education Workshop)

The Helms Hall Board of Trustees recently announced the addition of ten names to the Helms Amateur Wrestling Hall of Fame. One of these men, the late Dr. Neal Quimby, Superintendent of the New Mexico School for the Visually Handicapped, Alamogordo, was well known in the field of education of blind children. Only 46 men have been chosen for the Hall of Fame, so this was a great honor for Dr. Quimby. These men have been chosen for wrestling, coaching or as contributors. Dr. Quimby was elected in the latter category.

The Amateur Wrestling News gives this brief sketch of Dr. Quimby — "After wrestling at Springfield College, Massachusetts, where he was twice captain of the wrestling team and undefeated in dual-meet competition, he went to the Overbrook School for the Blind, Philadelphia. It was there that he pioneered wrestling for the blind in 1929. Since that time, due largely to his efforts, wrestling has become the leading sport in schools for the blind in the United States, with more than 500 boys participating each year. In 27 years of coaching the blind, Dr. Quimby produced 19 undefeated teams, 7 at Overbrook and 12 at the New Mexico School."

Those of us who have had a hand in bringing Dr. Quimby's name before the Board are very happy about his nomination for two reasons: First, a deserving candidate received recognition; and, second, another step forward was taken by wrestling for the blind.

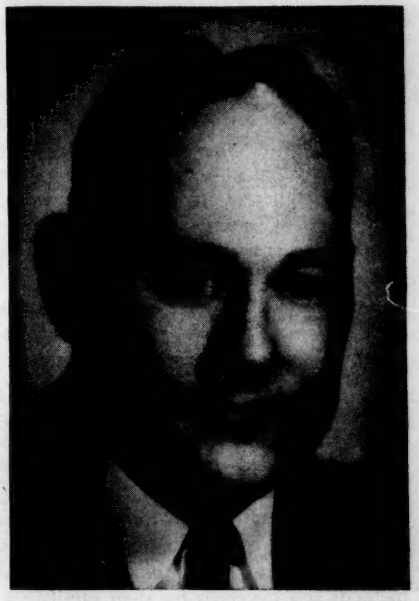
As this news spurs us on to bigger and better efforts of our wrestling teams, we salute Dr. Quimby, who started it all. Wrestling has revolutionized the boys' athletic program in schools for the blind. Let's each one of us resolve to do his best to promote wrestling for blind boys on every front. By doing this, each one of us can carry on in his small way the great work of Dr. Neal Quimby.

Dr. Charles Buell, Teacher
California School for the Blind

(Shortly after the above article was prepared, the announcement was received of the death of Dr. Quimby, see page 93. *The Journal* staff felt that its readers would appreciate learning of this recent honor to Dr. Quimby by the Helms Hall Board.)

Necrology

Dr. Neal Quimby Dies



Educators in our field will be saddened to learn of the death of Neal F. Quimby who passed away on January 11, following a brief illness. Born in Littleton, New Hampshire in 1907, he graduated from Springfield College, Massachusetts, and later received his Ed.D. degree at Temple University, Philadelphia.

Dr. Quimby entered this field in 1929 as a teacher at Overbrook in Philadelphia, where he pioneered wrestling for the blind and where he later became Assistant Principal. In 1943 he was appointed Superintendent of the New Mexico School for the Visually Handicapped, which position he occupied until his death. Under his administration the school in New Mexico experienced a period of outstanding growth, which saw the construction of several new buildings and the addition of new departments within the school program.

Mr. Quimby's contributions to this field have been many and varied. He wrote numerous articles, served on important committees within the AAIB, and in 1952 became that organization's President. He will be greatly missed both at school and nationally. He is survived by his wife, Celia, and his son, William.

J. Hiram Chappell

J. Hiram Chappell, senior staff member, Services to the Blind, Office of Vocational Rehabilitation of the Department of Health, Education, and Welfare, died on December 24. Mr. Chappell was a pioneer in solving employment problems for blind people, and was author and co-author of several important publications dealing with the employment of the blind.

An outstanding leader of blind people, and himself blind, he was the recipient of the Oveta Culp Hobby Award of the Department of Health, Education, and Welfare, and the Migel Medal of the American Foundation for the Blind. Mr. Chappell was admired and respected by those who knew him, and his passing represents a loss to this field.

TO PUT IT BRIEFLY

News and Views from the Field

Journalistic adage: "Be brisk, be brief, be bright, be right!"

A Word from the Editor

The International Journal for the Education of the Blind has entered its tenth year of publication. During this period it has experienced growth both in the variety and the quality of its offering. However, if it is to maintain such growth it must receive an increasing body of material for publication.

Those responsible for the development of *The Journal* represent a variety of disciplines: teachers, houseparents, guidance counselors, administrators and college personnel. There is, and will always be, progress at the local level, for each one is interested in meeting problems pertinent to his area. If any profession is to advance, however, there must be a free and voluminous exchange of information between its members. Teachers developing new methods and materials for their pupils, administrators experimenting with program adjustments, and research workers studying basic problems should communicate their experiences to others. By so doing, they will contribute to the improvement of programs everywhere.

Copies of an announcement soliciting articles for publication in *The Journal* were recently mailed to schools and classes for the blind, special education departments of colleges and related agencies throughout the country. It is hoped that most of our readers will see these notices, and that a large number will respond by submitting publication material.

It is the wish of the new Editor that the high standards established by his predecessor, V. R. Carter, and earlier editors, will be maintained, and that further, with your cooperation, *The International Journal* will continue to expand its services to the field.

William T. Heisler, Editor

Travel Workshop Postponed

The AAIB Mobility Orientation and Travel Workshop, scheduled for January 21st, at the Maryland School for the Blind, was cancelled because of the snow. A future announcement will be circulated, indicating a new date for this important workshop.

Beatrix Baird, Coordinator
Maryland School for the Blind

AAIB Scholarships

The American Association of Instructors of the Blind announces the availability of scholarships for those desiring to enter the field of teaching the blind. The granting of these scholarships is subject to the following conditions:

1. Applicants must choose a college or graduate school where courses in Special Education are available. In the choice of college or university, preference should be given to an institution offering area courses for the blind. Preference will be given to new candidates entering the field. Consideration will be given to both undergraduate and graduate students. Undergraduate awards are given only for junior and senior years.

2. Awards are made for one year, subject to consideration for subsequent year grants to recipients after review of grades and progress.

3. Awards range from $300 per year to $1500 per year, depending upon needs of applicants and available funds.

4. Each recipient of an award must sign a statement promising to teach visually handicapped children for at least one year after completion of their course of study.

Applications for Scholarships may be obtained from:

Maurice Olsen, Executive Secretary
American Association of Instructors of the Blind
2363 South Spring Avenue
St. Louis 10, Missouri

Calling All "Hams"

"CQ! CQ! This is W5BLH."

Anyone monitoring the radio band reserved for "ham" radio enthusiasts on any given night might pick up this urgent-sounding message. Actually, it is merely a general invitation or call to anyone listening to strike up a conversation or code message exchange with the calling station. KW5BLH is the Federal Communications Commission (FCC) official designation for the Oklahoma School for the Blind amateur radio club station. In identification procedures over the air, the "K" is dropped for the sake of brevity since it is a prefix in all amateur operators' and station licenses.

Over the years, several graduates of this school have become amateur radio operators, fully licensed by FCC. It was thought worthwhile, therefore, to establish a club at the school, in which interested older pupils could learn the art of sending and receiving Morse code, general radio techniques, and Federal laws controlling all radio broadcasting. In September, 1959, such a club was established under the sponsorship of the school, and under the trusteeship of a licensed operator, as required by FCC. Ronald Greb, a graduate of the school, served as trustee and instructor. With equipment consisting only of a used oscillator for teaching code, a group of ten youngsters went to work with spirited enthusiasm, using the vacated operating room in the school hospital as its headquarters. The Muskogee Amateur Radio Club and the school Patrons Association immediately took an active interest in the club's need for equipment.

The purpose of this discourse is not merely to tell others what we are doing. The principal reason for our writing an article is to encourage other schools to "get into the swim" and set up their own amateur radio clubs. It is relatively simple, but does take an enthusiastic nucleus of pupils who have the will to do some hard work, and it requires faithful adult patronage by those who know something about "ham" radio operations.

Not all pupils are adapted to radio code work and technology, as was demonstrated by the fact that four of the original ten dropped out after a few weeks of orientation. The remaining six formed a club, adopted a set of by-laws (as required by FCC), and set out to obtain their novice licenses. Eighteen months later, all of the original six have obtained novice ratings, and one of these has earned his general amateur radio license.

The first item of equipment to be purchased by joint Patrons Association and school funds was a Harvey Wells receiving set. This was shortly followed by a DX-40 transmitter of 75 watt CW capacity and 65 watt phone capacity. These were purchased in good used condition, so that the club has only about $250 invested in equipment to date.

Any school that plans to set up an amateur radio club will have many questions to ask about procedure. If there is a licensed general operator, or, better yet, if there is an established club of adults in the community, either of these can possibly guide a school in setting up a club of its own, and probably would eagerly undertake the task. A school club must have a

trustee who is licensed by FCC with a general license. The school club must draw up bylaws and submit these, along with an application, to the Federal Communications Commission.

The novice license is good for one year, and cannot be renewed. It is intended to serve as a stimulus to the student to work toward a general license. To pass the novice test, one must send and receive five words (25 characters) per minute Morse code, and satisfactorily answer 20 questions on theory. The novice can transmit only by code except on very confined, or local VHF phone transmissions. No unlicensed person may transmit, and the FCC is strict in the enforcement of its regulations.

The general license, which is good indefinitely, requires the operator to be able to transmit and receive 13 words (65 characters) per minute, and answer a more detailed set of questions on radio theory and FCC regulations.

Members of the OSB club would like to see a "net" of clubs formed in schools for the blind. So, in signing off, this is W5BLH, asking this one question: Will you answer our CQ?

V. R. Carter, Superintendent
Oklahoma School for the Blind

NBLSB Expands

The National Bowling League of Schools for the Blind, more commonly known as NBLSB, kicked off its 1960-61 season in October with more schools participating, and with heightened interest in this recreational activity of competition bowling by mail between residential schools. Sixteen schools are participating in the "Open Division" this year, and the "Junior Division" has been expanded to include six schools. A newly created "Girls Division" was set up, and includes seven residential schools at the very outset.

Information in detail will be furnished promptly to any school interested in forming a team for one or more of the divisions of NBLSB. It is too late to affiliate for the present season, but plans can now be made to include new schools for the 1961-62 season. For details, write to V. R. Carter, League Secretary of NBLSB, 3300 Gibson St., Muskogee, Oklahoma; or write to Bob McQuie, Secretary of the Girls and the Junior Divisions, in care of Missouri School for the Blind, 3815 Magnolia Ave., St. Louis 10, Missouri.

Primary Science Lessons

Students teaching in the demonstration class of the 1960 summer session workshop of the University of Wisconsin prepared a series of Primary Science Lessons, with special emphasis on meaningfulness to blind children. The Lessons included:

"The Guinea Pig"
"A Study of Two Fowl"
"The Wasp Story"
"Water, and Animals Who Live in the Water"
"Really Seeing Trees"
"Making a Salad"

A few copies of each of the above are available upon request. Write to:

Mrs. Ruth Lynch
Wisconsin School for the Visually Handicapped
Janesville, Wisconsin

AAIB Announcement

Any AAIB members wishing to be placed on the mailing list for receiving future copies of the monthly newsletter *Fountainhead* should notify Mr. Maurice Olsen, Executive Secretary, AAIB, 2363 South Spring Avenue, St. Louis 10, Missouri. Also, it is possible to secure back-issues by sending in requests to Mr. Olsen.

The International Journal for

THE EDUCATION OF THE BLIND, INC.

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Joseph R. Shinpaugh, *First Vice-President*

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